

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) In a computer system with a message processor, a method of ~~reprocessing at least a portion of a message from which a portion has been removed after where~~ an attempt to previously process the message failed, the method comprising the acts of:

receiving a first message at the computer system that is intended for a particular recipient, wherein the computer system is configured to process messages and log state information to identify each message and the state of the processing of each message in a log, such that upon attempting to process a message, the computer system logs a first indication along with an identifier of the message to indicate that the computer system is attempting to process the message, and upon successfully processing the message, the computer system logs a second indication along with the identifier of the message to indicate that the computer system successfully processed the message;

attempting to process the first message in order to deliver the first message to the recipient, wherein upon attempting to process the first message, the computer system logs the first indication corresponding to the first message; logging state information corresponding to each of a plurality of received messages to a log of state information, wherein logged state information includes an identity of each of the plurality of received messages and the state information identifying the status of each of the plurality of received messages at the time the state information was logged and including a start state indicating the message processor is attempting to process the message and a state indicating whether the message processor completed the processing of the message;

subsequent to logging the first indication corresponding to the first message state information, the computer system failing to process the message such that the computer system does not log the second indication corresponding to the first message;

the computer system accessing the log of state information and identifying a message indicated as being processed by the message processor for which completion is

~~not indicated, thereby indicating based on the absence of the second indication, that the message previously failed to process; and~~

~~repeatedly attempting to reprocess the first message by first removing a portion of the first message and then attempting to reprocess the first message such that at each attempt to reprocess the first message, a different portion of the first message is removed prior to reprocessing the first message, such that the first message is repeatedly reprocessed until it is successfully processed or until a predefined point at which it is determined that the first message should be deleted rather than reprocessed.~~

~~in response to identifying the message previously failed to process, the computer system logging a second state information to the log of state information indicating that the message is being de-featured according to a first rule, removing a portion of the message in accordance with the first rule to increase the likelihood of the message processor being able to appropriately process the message, and attempting to reprocess the message subsequent to removing the portion of the message.~~

2. (Currently Amended) The method of claim 1, further comprising the acts of:

the computer system receiving a new message;

the computer system generating an identifier for the new message;

the computer system checking the state-log to determine if a ~~start state~~first indication exists for the new message;

upon a determination that no ~~start state exists~~first indication exists for the new message, the computer system logging the identifier for the new message and ~~an a~~ a first indication along with the identifier that the processing of the new message has started; and

the computer system attempting to process the new message and logging state information indicating that ~~the new message successfully processed~~the second indication along with the identifier only in response to the new message processing completing successfully.

3. (Previously Presented) The method of claim 2, wherein the identifier is a hash of the new message.

4. (Previously Presented) The method of claim 2, wherein the new message is one of an e-mail message, SOAP message, messaging board post, web message, or instant message.

5. (Currently Amended) The method of claim 1 wherein at each attempt to reprocess the first message, the computer system logs a third indication along with the identifier that specifies which portion of the message was removed for the attempt to reprocess the first message such that upon each subsequent attempt to reprocess the first message, the computer system determines which portion was removed for the previous attempt and removes the previously removed portion in addition to another portion prior to the subsequent attempt to reprocess the first message, further comprising the acts of:

~~subsequent to logging the second state information, accessing the log of state information and identifying a message indicated as being processed by the message processor for which completion is not indicated and for which the second state information is present, thereby indicating that the message is a previously disfeatured message that previously failed to reprocess;~~

~~logging a third state information to the log of state information indicating that the message is being de-featured according to a second rule;~~

~~removing a second portion of the message in accordance with the second rule to increase the likelihood of the message processor being able to appropriately process the message; and~~

~~attempting to reprocess the message subsequent to removing the second portion of the message;~~

6-7. (Canceled)

8. (Currently Amended) The method of claim 1, wherein the computer system accesses rules which specify which portion of the first message should be removed at each attempt to reprocess the first message and wherein the first rule is based on the type of content within the portion of the message removed.

9. (Original) The method of claim 8, wherein the type of content within the portion of the message removed is one or more of an alternative format of the message, video data, audio data, image data, text, header information, or executable instructions.

10. (Original) The method of claim 8, wherein the rules are defined by the transport protocol for the message, which is one of STMP, HTTP, TCP, UDP, or SOAP.

11. (Original) The method of claim 8, wherein the rules are defined by content format MIME, and wherein the content of the portion of the message removed is one or more of a mixed multipart data, alternative multipart data, parallel multipart data, digest multipart data, application data, video data, audio data, image data, text, header information or the message itself.

12-23. (Canceled)

24. (Currently Amended) A computer program product for use in a computer system with a message processor, the computer program product for implementing a method of reprocessing at least a portion of a message from which a portion has been removed after where an attempt to previously process the message failed, the computer program product comprising the one or more computer readable storage media having stored thereon computer-executable instructions that, when executed by a processor, cause the computer system to perform the following:

receive a first message that is intended for a particular recipient, wherein the computer system is configured to process messages and log state information to identify each message and the state of the processing of each message in a log, such that upon attempting to process a message, the computer system logs a first indication along with an identifier of the message to indicate that the computer system is attempting to process the message, and upon successfully processing the message, the computer system logs a second indication along with the identifier of the message to indicate that the computer system successfully processed the message;

attempt to process the first message in order to deliver the first message to the recipient, wherein upon attempting to process the first message, the computer system logs the first indication corresponding to the first message;

subsequent to logging the first indication corresponding to the first message, fail to process the message such that the computer system does not log the second indication corresponding to the first message;

access the log and identifying, based on the absence of the second indication, that the message previously failed to process; and

repeatedly attempt to reprocess the first message by first removing a portion of the first message and then attempting to reprocess the first message such that at each attempt to reprocess the first message, a different portion of the first message is removed prior to reprocessing the first message, such that the first message is repeatedly reprocessed until it is successfully processed or until a predefined point at which it is determined that the first message should be deleted rather than reprocessed.

log state information corresponding to each of a plurality of received messages to a log of state information, wherein logged state information includes an identity of each of the plurality of received messages and the state information identifying the status of each of the plurality of

~~received messages at the time the state information was logged and including a start state indicating the message processor is attempting to process the message and a state indicating whether the message processor completed the processing of the message;~~

~~subsequent to logging the state information, access the log of state information and identify a message indicated as being processed by the message processor for which completion is not indicated, thereby indicating that the message previously failed to process; and~~

~~in response to an identification that the message previously failed to process, log a second state information to the log of state information indicating that the message is being de-featured according to a first rule, remove an portion of the message to increase the likelihood of the message processor being able to appropriately process the message; and~~

~~attempt to reprocess the message subsequent to removing the portion of the message.~~

25. (Currently Amended) The computer program product of claim 24, further comprising computer-executable instructions that, when executed by a processor, cause the computer system to perform the following:

receive a new message;

generate an identifier for the new message;

check the ~~state~~ log to determine if a first indication~~start state~~ exists for the new message;

upon a determination that no ~~start state~~first indication exists for the new message, log a first indication along with the identifier for the new message ~~and an indication that the processing of the new message has started; and~~

~~attempt to process the new message, and log state information indicating that the new message successfully processed the second indication along with the identifier only in response to the new message processing completing successfully.~~

26. (Previously Presented) The computer program product of claim 25, wherein the new message is one of an e-mail message, SOAP message, messaging board post, web message, or instant message.

27. (Currently Amended) The computer program product of claim 24, wherein at each attempt to reprocess the first message, the computer system logs a third indication along with the

identifier that specifies which portion of the message was removed for the attempt to reprocess the first message such that upon each subsequent attempt to reprocess the first message, the computer system determines which portion was removed for the previous attempt and removes the previously removed portion in addition to another portion prior to the subsequent attempt to reprocess the first message, wherein the attempt to reprocess the message fails, the computer-executable instructions that, when executed by a processor, cause the computer system to further perform the following:

~~subsequent to logging the second state information, access the log of state information and identify a message indicated as being processed by the message processor for which completion is not indicated and for which the second state information is present, thereby indicating that the message is a previously disfeatured message that previously failed to reprocess;~~

~~logging a third state information to the log of state information indicating that the message is being de-featured according to a second rule;~~

~~remove a second portion of the message in accordance with the second rule to increase the likelihood of the message processor being able to appropriately process the message; and~~

~~attempt to reprocess the message subsequent to removing the second portion of the message.~~

28-29. (Canceled)

30. (Currently Amended) The computer program product of claim 24, wherein the computer system accesses rules which specify which portion of the first message should be removed at each attempt to reprocess the first message and wherein the a first rule is based on the type of content within the portion of the message removed.

31. (Original) The computer program product of claim 30, wherein the type of content within the portion of the message removed is one or more of an alternative format of the message, video data, audio data, image data, text, header information, or executable instructions.

32. (Original) The computer program product of claim 30, wherein the rules are defined by the transport protocol for the message, which is one of STMP, HTTP, TCP, UDP, or SOAP.

33. (Currently Amended) The method of claim 1 further comprising the act of periodically scanning the log ~~of state information~~ in order to find messages that have not processed successfully.

34. (Currently Amended) The method of claim 1 further comprising the act of scanning the log ~~of state information~~ in order to find messages that have not processed successfully in response to an event consisting one of (1) system reboot, (2) process restart, or (3) thread restart.